important consid ration, because for the sensor array to measure, sense, sample and detect useful information, all cells in the array need to lie within the depth of focus of lithographic equipment 10. For example, where lithographic equipment 10 is a stepper having a numerical aperture NA and using a radiation source of wavelength λ, the depth of focus may be characterized as $\lambda/(NA)^2$. As such, for 193nm stepper with NA = 0.75, the depth of focus is 340nm and, it may be preferable to maintain a surface flatness of sensor array 106 smaller than the depth of focus, for example, within 100nm.

It should be noted that in those situations where lithographic equipment 10 employs UV light, it is preferable to employ a sensor array 106 that is UV-stable (i.e., does not emit any significant contamination detrimental to lithographic equipment 10 (or portions thereof) under illumination. Moreover, it may be advantageous to passivate sensor unit 102 and/or sensor array 106, for example, with a coating of an inert material, to enhance the structural and/or performance stability of sensor unit 102 and/or sensor array 106. The sensor array 106 and/or sensor unit 102 may also be coated with anti-reflection materials to reduce reflecting light back into lithographic equipment 10 (for example, the optical sub-system of lithographic equipment 10).

When using anti-reflection (AR) costing on the sensor array 106, the coating may cover the entire sensor array 106, or may only cover the area outside the apertures 206. The AR coating may be applied before or after the apertures 206 are processed. When the AR is coated before the apertures are processed, the aperture processing may be drilling or etching the apertures through both the AR coating and the blocking layer 204. To reduce the total aperture aspect ratio for the benefits described before, it is maybe advantageous to recess the AR coating from the aperture, so that the AR layer's thickness